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Application Number	09/871,324
Filing Date	May 31, 2001
First Named Inventor	John Wnek et al.
Group Art Unit	1725
Examiner Name	Jonathan J. Johnson
Attorney Docket Number	4348-000119/DVA

I hereby appoint:

☐ Practitioners at Customer Number

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☒ Practitioner(s) named below:

Name	Registration Number
Michael P. Brennan	30,612
Stanley M. Erjavac	38,442

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Name

RICHARD GEHRIN

Signature

Date

11/8/02

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below\*.

☐ \*Total of \_\_\_\_\_ forms are submitted.

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ation<sup>58</sup> reveal that in 1968, single and double wall accounted for over 99% of the sales of corrugated board. (Tr. 583) Even including estimates of Tri-Wall's output, of a total of 840 billion square feet of corrugated paper board produced by the industry (Tr. 609), significantly less than 1%, some 450 million square feet,<sup>59</sup> was triple wall board. (Tr. 588-9)

At best, Tri-Wall can be credited with being the first to produce a stronger corrugated board container by adding a third line of single face sheet to the conventional corrugation line. As we see it, this does not constitute a patentable development, *Preuss v. General Electric Co.*, 392 F.2d 29, 157 USPQ 177 (2d Cir. 1968), especially where, as here, the alleged invention involves a combination of elements and devices common in the prior art with the resulting danger of removing extant knowledge from the public domain. *Continental Can Co. v. Old Dominion Box Co.*, 393 F.2d 321, 157 USPQ 353 (2d Cir. 1968).

#### Conclusion

Based on the total trial record before us, we find in contemplation of law that:

1. the patent in suit teaches the "two step" method of manufacture;
2. the plaintiff is not barred by collateral estoppel from prosecuting the pending claims;
3. the handmade unimpregnated board constituted a nonexperimental prior public use invalidating the patent in suit pursuant to 35 U.S.C. § 102;
4. the patent in suit, "obvious at the time the invention was made," is invalid pursuant to 35 U.S.C. § 103. Therefore, we are constrained and do find the Tri-Wall patent, 3,093,224 invalid.

The Clerk of this Court is directed to enter judgment in favor of defendant Continental Can Co., Inc.

<sup>58</sup>These figures do not reflect Tri-Wall production because plaintiff does not report to the association.

<sup>59</sup>Witness Goetsch estimated that of 586 converting plants (operating corrugation lines) 20 manufacture triple wall board, and only 4-5 run three wall at least once a week. Query, how much business has the patent's revelations brought Goetsch's employer?

#### Court of Customs and Patent Appeals

In re SWINEHART AND SFILIGOJ

No. 8396

Decided Apr. 1, 1971

#### PATENTS

##### 1. Claims — Functional — In general (§20.451)

"Functional" indicates nothing more than fact that attempt is being made to define something by what it does rather than by what it is; there is nothing intrinsically wrong with use of such technique in drafting patent claims.

##### 2. Claims — Functional — In general (§20.451)

Court sees no merit in any proposition which would require denial of claim solely because of type of language used to define subject matter for which patent protection is sought.

##### 3. Claims — Functional — In general (§20.451)

##### Patentability — Subject matter for patent monopoly — Function (§51.603)

Concern over use of functional language at "point of novelty" stems largely from fear that applicant will attempt to distinguish over reference by emphasizing property or function not mentioned in reference and thereby assert that his claimed subject matter is novel; such a concern is irrelevant and misplaced; mere recitation of newly discovered function or property, inherently possessed by things in prior art, does not cause claim drawn to those things to distinguish over prior art; additionally, where Patent Office has reason to believe that functional limitation asserted to be critical for establishing novelty in claimed subject matter may, in fact, be an inherent characteristic of prior art, it possesses authority to require applicant to prove that subject matter shown to be in prior art does not possess characteristic relied on.

##### 4. Claims — Functional — In general (§20.451)

There is no support, in holdings of prior cases or in statute, for proposition that "functional" language, in and of itself, renders claim improper; moreover, there is no court decision holding that there is some other ground for objecting to claim on basis of any language, "functional" or otherwise,

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## of Customs and Patent Appeals

In re SWINEHART AND SFILIGOJ

Decided Apr. 1, 1971

TS  
ns — Functional — In general  
(§20.451)

"functional" indicates nothing more than an attempt is being made to define by what it does rather than by its intrinsic nature; there is nothing intrinsically about the use of such technique in drafting claims.

s — Functional — In general  
(§20.451)

sees no merit in any proposition which would require denial of claim solely on the type of language used to define the matter for which patent protection is sought.

— Functional — In general  
(§20.451)

ability — Subject matter for  
a patent monopoly — Function  
(§20.603)

over use of functional language at the expense of novelty stems largely from fear that applicant will attempt to distinguish his invention by emphasizing property or feature not mentioned in reference and that his claimed subject matter is merely a concern is irrelevant and does not constitute a mere recitation of newly discovered property, inherently possessing in prior art, does not cause novelty to those things to distinguish prior art; additionally, where Patent Office reason to believe that functional language asserted to be critical for establishing novelty in claimed subject matter may, in itself, be an inherent characteristic of prior art, it is proper for the Patent Office to require applicant to show that subject matter shown to be novel does not possess characteristic of prior art.

— Functional — In general  
(§20.451)

to support, in holdings of prior art, a statute, for proposition that language, in and of itself, is improper; moreover, there is no holding that there is some basis for objecting to claim on basis of language, "functional" or otherwise,

beyond what is already sanctioned by 35 U.S.C. 112.

## 5. Claims — Broad or narrow — In general (§20.201)

Claims — Functional — In general  
(§20.451)

Claims — Indefinite — In general  
(§20.551)

Assuming that applicant is claiming what he regards as his invention, there are in reality only two basic grounds for rejecting claim under 35 U.S.C. 112; first is that language used is not precise and definite enough to provide clear-cut indication of scope of subject matter embraced by claim; this ground finds its basis in second paragraph of section 112; second is that language is so broad that it causes claim to have a potential scope of protection beyond that which is justified by specification disclosure; this ground stems from first paragraph of section 112; merits of "functional" language in claim must be tested in light of these two requirements alone.

## 6. Claims — Functional — In general (§20.451)

"Functional" terminology may render claim quite broad; by its own literal terms, claim employing such language covers any and all embodiments which perform recited function; legitimate concern often exists as to whether scope of protection defined thereby is warranted by scope of enablement indicated and provided by description contained in specification; this is not to say, however, that every claim containing "functional" terminology is broad, since, in many cases, it is obvious that only a very limited group of objects will fall within intended category.

## Particular patents—Crystalline Materials

Swinehart and Sfiligoj, Crystalline Materials, claim 24 of application allowed.

Appeal from Board of Appeals of the Patent Office.

Application for patent of Carl F. Swinehart and Marko Sfiligoj, Serial No. 314,952, filed Oct. 9, 1963; Patent Office Group 165. From decision rejecting claim 24, applicants appeal. Reversed; Lane, Judge, concurring with opinion; Almond, Judge, dissenting with opinion.

JOHN P. HAZZARD and JAMES A. LUCAS, Cleveland, Ohio, for appellant.

S. WM. COCHRAN (JOSEPH F. NAKAMURA of counsel) for Commissioner of Patents.

Before RICH, ALMOND, BALDWIN, and LANE, Associate Judges, and NEWMAN, Judge, United States Customs Court, sitting by designation.

BALDWIN, Judge.

This appeal is from the decision of the Patent Office Board of Appeals, adhered to on reconsideration, which affirmed the rejection of claim 24 in appellants' application<sup>1</sup> as failing to meet the requirements of 35 U.S.C. 112. The board reversed the rejection of two other claims.

## The Invention

The subject matter of the appealed claim is a composition of matter essentially made up of barium fluoride and calcium fluoride in approximately eutectic proportions. The record indicates, and appellants confirm, that "[e]utectic compositions of barium fluoride and calcium fluoride are well known in the prior art." However, appellants are apparently the first to discover that when crystalline forms of these two components are melted together in eutectic proportion and then resolidified by "conventional crystal-growing techniques," there results a multi-phase crystalline body characterized by an intimate matrix of large, visible crystals, which, unlike the prior art materials, does not cleave, is resistant to thermal shock and impact and approaches maximum density for the overall composition. In addition, and allegedly unexpectedly, these crystalline bodies "are capable of transmitting collimated light," especially in the infrared wave range.

The appealed claim recites:

24. A new composition of matter, transparent to infra-red rays and resistant to thermal shock, the same being a solidified melt of two components present in proportion approximately eutectic, one of said components being BaF<sub>2</sub> and the other being CaF<sub>2</sub>.

According to their brief, "[t]he exact point of novelty between appellants' claimed composition and that of the prior art is transparency."<sup>2</sup>

<sup>1</sup> Serial No. 314,952, filed October 9, 1963, for "Crystalline Materials."

<sup>2</sup> We observe that the term "transparent", as indicated by its primary dictionary definition of "having the property of transmitting light without appreciable scattering so that bodies lying beyond are entirely visible," generally is taken to refer to those light waves which are visible to the human eye. The parties here seem to agree that in the

### The Grounds for Rejection

The examiner rejected claim 24 "for failing to particularly point out and distinctly claim the invention as required in 35 U.S.C. 112." His asserted reasons were as follows:

Claim 24 is functional and fails to properly point out the invention. Applicants point out on page 2 of the specification, lines 24-27 that when the components are merely fused and cast as an integral body, said body is opaque. This claim in reciting "transparent to infrared rays" is thus improperly functional. \*\*\* It should also be noted that this claim does not require more than one phase.

The board agreed, adding:

Claim 24 stands rejected as improperly functional in that it distinguishes over the unsatisfactory material of appellants' figure 3 merely in the functional term "transparent to infrared rays." We agree with the examiner in this respect, as transparency of the claimed material cannot be treated as an inherent, characteristic property, in view of the fact that the composition of appellants' Example V (figure 3) lacks this property, yet is made of the same materials as appellants' Example I. \*\*\* This claim is not the type covered by a proper functional limitation pursuant to 35 U.S.C. 112, since the language in question does not define a means or a step, or a distinguishing ingredient.

### Opinion

It is fairly safe to conclude from the language quoted above that the examiner and the board considered the use of functional language, per se, to render the instant claim indefinite. Appellants have apparently conceded that "functionality" is ordinarily equated with indefiniteness. They argue strenuously, however, that the disputed language here does not necessarily refer to a function of the recited composition or to a desired result but rather it defines a physical property. On the record produced in the Patent Office, therefore, it would appear that the single issue before us is whether the disputed language is in fact "functional". If this issue were determinative, appellants would fail since we have no doubt that such

claim before us the term is used in its less common sense of being "pervious to any specified form of radiation." Clearly the most important defining characteristic of the word, which is the same in either sense, is that the light is transmitted "without appreciable scattering." Ref: Webster's Third New International Dictionary (G & C Merriam Co., 1969).

language is "functional" at least insofar as we interpret the meaning of that term. In any event, for reasons which will become clear as this opinion progresses, we find that issue to be not only *not* determinative of whether claim 24 satisfies the requirements of 35 U.S.C. 112 but also irrelevant in the analysis leading up to that determination.

[1] We take the characterization "functional" as used by the Patent Office and argued by the parties, to indicate nothing more than the fact that an attempt is being made to define something (in this case, a composition) by what it *does* rather than by what it *is* (as evidenced by specific structure or material, for example). In our view, there is nothing intrinsically wrong with the use of such a technique in drafting patent claims.<sup>3</sup> Indeed we have even recognized in the past the practical necessity for the use of functional language. See, for example, *In re Halleck*, 57 CCPA 954, 421 F.2d 911, 164 USPQ 647 (1970). We recognize that prior cases have hinted at a possible distinction in this area depending on the criticality of the particular point at which such language might appear.<sup>4</sup> Our study of these cases has satisfied us, [3] however, that any concern over the use of functional language at the so-called "point of novelty" stems largely from the fear that an applicant will attempt to distinguish over a reference disclosure by emphasizing a property or function which may not be mentioned by the reference and thereby assert that his claimed subject matter is novel. Such

<sup>3</sup> We think our views herein are in accord with those of Congress as indicated by the language of the third paragraph of 35 U.S.C. 112. Note also the discussion and authorities cited on this point in *In re Fuetterer*, 50 CCPA 1453, 319 F.2d 259, 138 USPQ 217 (1963).

[2] The solicitor, it appears, would also treat the question of *what* is being defined as important. He distinguishes a case relied on by appellants as "irrelevant" since the functional term there permitted dealt with novel proportions in a composition whereas here the question is "whether novelty in structure can be precisely defined in wholly functional terms." Nevertheless, we are unable to see merit in any proposition which would require the denial of a claim *solely* because of the type of language used to define the subject matter for which patent protection is sought. Insofar as the opinion in *In re Fisher*, 50 CCPA 1025, 307 F.2d 948, 135 USPQ 22 (1962), cited and relied on by the Patent Office here is inconsistent with the above statement, it will no longer be followed. Any doubt whether claims containing language such as that used in the *Fisher* case would be patentable was laid to rest last term when this court reversed the Patent Office position when the *Fisher* application came before us for a second time. See *In re Fisher*, 57 CCPA 1099, 427 F.2d 833, 166 USPQ 18 (1970).

is "functional" at least insofar as it sets the meaning of that term. In fact, for reasons which will become apparent as our opinion progresses, we find that the fact that an attempt is being made to define something (in this case, a function) by what it *does* rather than by what it *is* (as evidenced by specific structural features, for example). In our view, there is nothing intrinsically wrong with the use of functional language in drafting patent claims.<sup>3</sup>

We have even recognized in the past the necessity for the use of functional language. See, for example, *In re Halleck*, 57 CCPA 421, 429 F.2d 911, 164 USPQ 647 (1970). We recognize that prior cases have not made a possible distinction in this area as clear as the criticality of the particular language used might appear.<sup>4</sup> In some of these cases we have satisfied us, however, that any concern over the use of functional language at the so-called "point of novelty" stems largely from the fear that the applicant will attempt to distinguish over the prior art by emphasizing a function which may not be defined by the reference and thereby assert that the claimed subject matter is novel. Such

our views herein are in accord with those expressed as indicated by the language of paragraph 35 of 35 U.S.C. 112. Note also the cases and authorities cited on this point in *In re Fisher*, 50 CCPA 1453, 319 F.2d 259, 138 USPQ 1963).

The solicitor, it appears, would also treat the question of *what* is being defined as important. It shows a case relied on by appellants as authority for the proposition that the functional term there permits the use of novel proportions in a composition. Here the question is "whether novelty can be precisely defined in wholly new terms." Nevertheless, we are unable to find any proposition which would require a claim *solely* because of the type of language used to define the subject matter for which protection is sought. Insofar as the opinion in *In re Fisher*, 50 CCPA 1025, 307 F.2d 948, 135 USPQ 162, cited and relied on by the Patent Office is inconsistent with the above statement, it should not be followed. Any doubt whether functional language such as that used in the present case would be patentable was laid to rest when this court reversed the Patent Office's decision in the *Fisher* application came before us last time. See *In re Fisher*, 57 CCPA 833, 166 USPQ 18 (1970).

a concern is not only irrelevant, it is misplaced. In the first place, it is elementary that the mere recitation of a newly discovered function or property, inherently possessed by things in the prior art, does not cause a claim drawn to those things to distinguish over the prior art. Additionally, where the Patent Office has reason to believe that a functional limitation asserted to be critical for establishing novelty in the claimed subject matter may, in fact, be an inherent characteristic of the prior art, it possesses the authority to require the applicant to prove that the subject matter shown to be in the prior art does not possess the characteristic relied on.

[4] We are convinced that there is no support, either in the actual holdings of prior cases or in the statute, for the proposition, put forward here, that "functional" language, in and of itself, renders a claim improper. We have also found no prior decision of this or any other court which may be said to hold that there is some other ground for objecting to a claim on the basis of any language, "functional" or otherwise, beyond what is already sanctioned by the provisions of 35 U.S.C. 112.<sup>5</sup>

[5] Assuming that an applicant is claiming what he regards as his invention, there are in reality only two basic grounds for rejecting a claim under § 112. The first is that the language used is not precise and definite enough to provide a clear-cut indication of the scope of subject matter embraced by the claim. This ground finds its basis in the second paragraph of section 112, the rationale for which was discussed by us recently in *In re Hammack*, 57 CCPA 1225, 427 F.2d 1378, 166 USPQ 204 (1970). The second is that the language is so broad that it causes the claim to have a potential scope of protection beyond that which is justified by the specification disclosure. Cf. *General Electric Co. v. Washburn Appliance Corp.*, 304 U.S. 364, 37 USPQ 466 (1938). This ground of rejection is now recognized as stemming from the

requirements of the first paragraph of 35 U.S.C. 112. See *In re Robins*, 57 CCPA 1321, 429 F.2d 452, 166 USPQ 552 (1970); *In re Borkowski*, 57 CCPA 946, 422 F.2d 904, 164 USPQ 642 (1970). Cf. *In re Halleck*, supra. The merits of the "functional" language in the claim before us must be tested in the light of these two requirements alone.

[6] "Functional" terminology may render a claim quite broad. By its own literal terms a claim employing such language covers *any and all* embodiments which perform the recited function. Legitimate concern often properly exists, therefore, as to whether the scope of protection defined thereby is warranted by the scope of enablement indicated and provided by the description contained in the specification. This is not to say, however, that every claim containing "functional" terminology is broad. Indeed, in many cases it will be obvious that only a very limited group of objects will fall within the intended category. Such appears to be the case here, since we do not sense any concern by the Patent Office that appellants are claiming more than they are entitled to claim under the first paragraph of section 112. We need not, therefore, consider whether there are any problems with the appealed claim arising under that paragraph. It is clear that the arguments of the parties are concerned solely with whether the disputed language serves to define the subject matter for which protection is sought with the distinctness and particularity which are required by the second paragraph of section 112.

In the brief for the Patent Office, it has been asserted for the first time that

the limits of appellant's invention clearly are not fixed by the expression "transparent to infrared rays." The expression is not defined, and in fact does not appear, in appellant's written description of their invention.

The solicitor points out that, in their specification, appellants demonstrate the novel aspect of their invention by setting out three charts depicting the percentage (as a function of wavelength) of infrared radiation transmitted through a 5mm thick "window" made from a eutectic composition of the components recited in the claim. One chart indicates that a fused and cast mixture of the two components transmits "substantially zero" collimated light in the infrared range. The other two charts indicate that when the fused mixture is "grown to form a crystal ingot", windows made therefrom transmit up to approximately 80% of infrared radiation depending on the particular wavelength of the

<sup>3</sup> Compare the following language quoted from the opinion in *Locklin v. Switzer Bros., Inc.*, 125 USPQ 515, 519 (N.D. Cal., 1959), *aff'd* 299 F.2d 160, 131 USPQ 294 (9th Cir. 1961):

Plaintiffs cite a multitude of cases in support of the argument that this functional expression invalidates the claims. But, none of these cases holds that claims employing functional expressions to define the claimed invention are per se invalid. In all of the cases relied upon by Plaintiff the claims were disapproved because under the particular circumstances the use of functional expressions either left the description of the invention too vague or made the claim broader than the invention.

ation. What those charts also appear to indicate, however, is that the conditions used in preparing the product may affect to some extent both the percentage transmission and the band of wavelength transmitted. The solicitor argues that "transparency is a matter of degree" and complains that because the "less favorable conditions" which produce a less effective product are not specifically disclosed in the specification

one would not know whether a product is "transparent to infrared rays", and therefore would infringe the claims, if the product transmits less infrared than is shown in Fig. 2.

Accepting the solicitor's argument as an attack on the definiteness of the disputed language in the claim before us, we must nevertheless disagree that the claim is rendered indefinite by that language. The record before us establishes that prior art compositions are substantially opaque to infrared rays. Appellants have produced a composition which is substantially transparent to such rays. Such a composition is conceded to be novel. It is true that the figures reproduced in the specification indicate that the degree of transparency varies depending on such factors as the conditions employed in producing the crystal, the thickness of the crystal and the particular wave length of the radiation transmitted. However, in all cases a *substantial* amount of infrared radiation is transmitted. We do not read appellants' disclosure as suggesting that only certain *degrees* of transparency to infrared are comprehended within the teaching there given. It follows that when appellants' claim is read in light of that disclosure the limits it purports to define are made sufficiently clear.

The decision of the board is *reversed*.

LANE, Judge, concurring.

I concur in the result reached by the principal opinion. While I do not necessarily disagree with the conclusions about functionality stated therein, I find it unnecessary in this case to make such conclusions.

Taking the language of the third paragraph of section 112 as a definition of the type of "functional" expressions which have long been troublesome in patent law, I find that such expressions are those which recite "a means or step for performing a specified function without the recital of structure, material, or acts in support thereof." An example of what is meant by "a specified function" is found in the Supreme Court's opinion in *General Electric Co. v. Wabash Appliance Corp.*, 304 U.S. 364, 37 USPQ

466 (1938). In that case, offsetting and sagging of filaments in incandescent lamps had long been a problem in the art. The specification there described how to remedy those problems by regulating the size and shape of the grains of material making up the filaments. The claims contained the following expression, which was relied upon for novelty: "grains of such size and contour as to prevent substantial sagging and off-setting during a normal or commercially useful life for such a lamp." *Id.* at 368, 37 USPQ at 468. The court stated:

"A limited use of terms of effect or result, which accurately define the essential qualities of a product to one skilled in the art, may in some instances be permissible and even desirable, but a characteristic essential to novelty may not be distinguished from the old art solely by its tendency to remedy the problems in the art met by the patent.

*Id.* at 371, 37 USPQ at 469. The court thus held, under the patent law then in effect, that certain kinds of functional expressions were impermissible at the point of novelty, specifically, those wherein the recited function is merely the solution of a problem in the art.

It cannot be the law that all functional terms are condemned when used to distinguish a claimed invention from the prior art. If this is the law, and it is carried to its logical conclusion, many nouns and adjectives would be condemned as functional, since they define in terms of use or effect. For example, a "door" is something used to close and open a passageway; a "nail" is an object used to hold two pieces of material together; a "black" material is one incapable of reflecting visible light. It is apparent to me that if functionality at the point of novelty is ever per se a ground for rejecting claims, it is not always so.

The kind of function recited in the product claim before us—transparent to infrared rays—is a physical characteristic of the composition of matter claimed. Moreover, no one has suggested a more distinct way of defining that composition, although it has been argued that the degree of transparency might be more precisely defined. I conclude that the recitation here is not the kind of claim functionality condemned by earlier cases but that it is a kind which is permitted.

It is true that all expressions in claims, functional or otherwise, must be definite in order to satisfy the second paragraph of 35 U.S.C. 112. I am in agreement with the



that case, offsetting and sagging in incandescent lamps had been in the art. The specifications described how to remedy those sagging by regulating the size and shape of material making up the filaments contained the following which was relied upon for such size and contour as to prevent sagging and off-setting or commercially useful life." *Id.* at 368, 37 USPQ at 469.

use of terms of effect or to accurately define the essence of a product to one skilled in the art in some instances be permissible, but a characteristic of novelty may not be derived from the old art solely by its remedy the problems in the art present.

USPQ at 469. The court thus patent law then in effect, that functional expressions were at the point of novelty, wherein the recited function solution of a problem in the

the law that all functional defined when used to distinguish from the prior art. If this is carried to its logical conclusion, nouns and adjectives would be functional, since they define an effect. For example, a thing used to close and open a "nail" is an object used to close material together; a nail is one incapable of reflecting light. It is apparent to me that if the point of novelty is ever reached for rejecting claims, it is not

function recited in the product itself—transparent to infrared light is a characteristic of the commercial claimed. Moreover, no one would find a more distinct way of defining a claim, although it has been argued that transparency might be more definite. I conclude that the recitation of the kind of claim functionality in earlier cases but that it is a characteristic.

at all expressions in claims, otherwise, must be definite in the second paragraph of 35 U.S.C. in agreement with the

principal opinion that the expression here in issue is reasonably definite.

ALMOND, Judge, dissenting.

I agree with everything in the majority opinion except the conclusion that appellants' use of the phrase "transparent to infra-red rays" in claim 34 does not make the claim indefinite. The majority apparently would define "transparent" as "substantially transparent" or as transmitting "a substantial amount of infrared radiation." This is necessary since accepting a dictionary definition such as "transmitting light" or "opposed to opaque" would raise the question of what there is in the mere word "transparent" to distinguish the claim from the prior art compositions which appellants have characterized as being only "substantially" opaque (indicating that some light may be transmitted).

Even reading the limitation "substantially transparent" into the claim, which is of questionable propriety since a claim should be given the broadest interpretation reasonable during prosecution (see *In re Prater*, 56 CCPA 1381, 415 F.2d 1393, 162 USPQ 541 (1969), does not in my opinion make the claim definite. When does a eutectic composition stop being "substantially opaque" and become "substantially transparent"? The mere fact that there is no definite answer to this question means to me that the claim is indefinite. The second paragraph of 35 U.S.C. 112 requires that the claim point out the invention with more particularity than was done here, and this is especially significant since "the exact point of novelty between appellants' claimed composition and that of the prior art is transparency." Since no clear metes and bounds have been set forth, it appears to me that the solicitor was right in stating that:

\*\*\* the lower limits of the claimed product are not fixed as to percent transmission and band of wavelengths transmitted, and one would not know whether a product is "transparent to infrared rays", and therefore would infringe the claims, if the product transmits less infrared than is shown in Fig. 2.

I would, therefore, affirm the decision of the board.

## Court of Customs and Patent Appeals

In re BOON

No. 8398

Decided Apr. 1, 1971

### PATENTS

#### 1. Board of Appeals — In general (\$19.05)

##### Evidence — Judicial notice (\$36.20)

Board's amplified reasons in support of affirmation of rejection did not constitute new ground of rejection, although reasons rely on additional facts, not previously in record, of which Board took notice, since, even when such facts are included, evidentiary scheme supporting Board's position does not differ in substance from that of examiner; additional facts played the type of minor role which is proper for facts which are judicially noticed.

#### 2. Board of Appeals — In general (\$19.05)

##### Evidence — Judicial notice (\$36.20)

Ordinarily, citation by Board of new reference, such as dictionary, and reliance thereon to support rejection, is considered as tantamount to assertion of new ground of rejection; this is not the case where such a reference is a standard work, cited only to support a fact judicially noticed and the fact so noticed plays a minor role, serving only to fill in the gaps existing in examiner's evidentiary showing to support rejection; under such circumstances, applicant must be given opportunity to challenge correctness of fact asserted or notoriety or repute of reference cited in support of assertion; more than a bald challenge, with nothing more, is needed to warrant reopening of prosecution so that applicant can respond; challenge to judicial notice by Board must contain adequate information or argument so that on its face it creates reasonable doubt regarding circumstances justifying judicial notice.

#### Particular patents—Air Conveyor

Boon, Air Conveyor System, claims 1, 4, 5, 7, 8, 12, 15, and 16 of application refused; remanded as to claims 2, 3, 6, 9 to 11, 13 and 14.

Appeal from Board of Appeals of the Patent Office.

Application for patent of William Boon, Serial No. 503,272, filed Oct. 23, 1965; Patent Office Group 313. From decision rejecting claims 1 to 16, applicant appeals.